






HOLLOW GLASS SPHERES

Patent number: GB2256867
Publication date: 1992-12-23
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Classification:
- international: C03C12/00; C03C3/078; C03C3/085; C03C3/087;
C03C3/091; C03C3/093; C03C3/097; C03C11/00;
C03C12/00; C03C3/076; C03C11/00; (IPC1-7):
C03C3/078; C03C3/083; C03C3/085; C03C3/087;
C03C3/089; C03C3/091; C03C3/093; C03C3/097;
C03C3/112; C03C3/115; C03C12/00
- european: C03C3/078; C03C3/085; C03C3/087; C03C3/091;
C03C3/093; C03C3/097; C03C11/00B
Application number: GB19910003510 19910220
Priority number(s): US19880236042 19880824; WO1989US03382
19890807

Also published as:

 WO9002102 (A1)
 EP0430995 (A1)
 US4983550 (A1)
 JP2069336 (A)
 ES2018910 (A6)

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Abstract not available for GB2256867

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(12) **UK Patent Application** (19) **GB** (11) **2 256 867** (13) **A**
(43) Date of printing by UK Office 23.12.1992

(21) Application No 9103510.5

(22) Date of filing 07.08.1989

(30) Priority data
(31) 236042 (32) 24.08.1988 (33) US

(86) International application data
PCT/US89/03382 En 07.08.1989

(87) International publication data
WO90/02102 En 08.03.1990

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(51) INT CL⁵
**C03C 12/00 3/078 3/083 3/085 3/087 3/089 3/091
3/093 3/097 3/112 3/115**

(52) UK CL (Edition K)
C1M MPB M440

(56) Documents cited by ISA
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(58) Field of search by ISA
US 501/33, 39, 57, 58, 59, 63, 66, 67, 68, 69, 70, 72.

(54) **Hollow glass spheres**

(57) Hollow glass spheres having average densities of approximately 10 grams/cc to approximately 2.0 grams/cc are prepared by heating solid glass particles. The glass spheres consist essentially of the following ingredients in the following amounts stated as weight percentages: SiO₂ (50 to 57 %); R₂O (2 to 15 %); B₂O₃ (0 to 20 %); S (.05 to 1.5 %); RO (2 to 25 %); RO₂ (other than SiO₂) (0 to 5 %); R₂O₃ (other than B₂O₃) (0 to 10 %); R₂O₅ (0 to 5 %); and F (0 to 5 %). R represents a metal or an element like phosphorous which combines with oxygen in glass. The sizes of the hollow glass spheres are selected to produce a maximum average strength for a desired average density.

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